CLAIMS

1. (currently amended) A method for determining a position of an electronic device within a wide area network including the electronic device and additionally including first and second network elements, said method comprising:

distributing a tracing tool to [[a]] the first network element within said wide area network;

detecting a physical separation of said electronic device and an associated user;

determining identifying indicia of said electronic device, wherein said identifying indicia are automatically transmitted by said electronic device during communication on the wide area network between said electronic device and [[a]] the second network element of said wide area network;

the first network element monitoring traffic on said wide area network utilizing said tracing tool, wherein said monitoring includes: comprises

in response to detecting said physical separation, the first network element intercepting data of said communication on the wide area network between said electronic device and said second network element, said data including said identifying indicia in response to detecting said physical separation; and

determining a physical position of said electronic device within said wide area network in response to an interception of said identifying indicia.

2. (previously presented) The method of claim 21, wherein said distributing further comprises distributing said tracing tool to a plurality of Internet protocol routers within said wide area network.

3. (previously presented) The method of claim 1, wherein determining said identifying indicia of said electronic device comprises:

identifying data transmitted by said electronic device prior to said physical separation utilizing a portion of said wide area network; and

extracting said identifying indicia from data transmitted by said electronic device prior to said physical separation.

4. (previously presented) The method of claim 1, wherein determining said identifying indicia of said electronic device comprises determining a media access control (MAC) address of said electronic device.

5. (currently amended) The method of claim 1, wherein determining said identifying indicia of said electronic device comprises:

    determining said identifying indicia utilizing at least one of a set including a hostname and an Internet Protocol (IP) address within data transmitted by said electronic device prior to said physical separation utilizing a portion of said wide area network.

6. (canceled)

7. (currently amended) The method of claim 1, wherein:

    said method further comprises causing data specifying said identifying indicia to be stored within a database associated with said first network element prior to said physical separation, and

    determining said identifying indicia of said electronic device comprises determining said identifying indicia utilizing said database.

8. (previously presented) The method of claim 1, said method further comprising generating a notification indicating said physical position of said electronic device for a responsible party associated with said electronic device.

9. (currently amended) A system for determining a position of an electronic device within a wide area network including the electronic device and at least an additional second network element, said system comprising:

    a hardware fingerprint server to determine identifying indicia of said electronic device, wherein said identifying indicia are automatically transmitted by said electronic device during communication on the wide area network between said electronic device and [[a]] the second first network element of said wide area network;

a monitoring server to detect a physical separation of said electronic device and an associated user and further to monitor traffic on said wide area network, wherein said monitoring server includes: ~~comprises~~

an intercept module, responsive to a detection of said physical separation, to intercept data of said communication on said wide area network between said electronic device and said second ~~first~~ network element, said data including said identifying indicia ~~in response to a detection of said physical separation~~; and

a tracing server to determine a physical position of said electronic device within said wide area network in response to an interception of said identifying indicia at said intercept ~~interception~~ module.

10. (canceled)

11. (currently amended) The system of claim 9, wherein said hardware fingerprint server is configured to:

identify data transmitted by said electronic device prior to said physical separation utilizing a portion of said wide area network; and

extract said identifying indicia from said data transmitted by said electronic device prior to said physical separation.

12. (previously presented) The system of claim 9, wherein said identifying indicia of said electronic device comprises a media access control (MAC) address of said electronic device.

13-20. (canceled)

21. (previously presented) The method of claim 1, wherein said distributing comprises distributing said tracing tool to a plurality of network elements within said wide area network.

22. (canceled)

23. (previously presented) The system of claim 9, wherein said monitoring server is distributed among a plurality of network elements within said wide area network.

24. (currently amended) A machine-readable medium having embodied therein program code a plurality of instructions executable by a machine embodied therein, wherein said program code plurality of instructions when executed causes said machine to perform a method for determining a position of an electronic device within a wide area network including the electronic device and additionally including first and second network elements, said method comprising:

> distributing a tracing tool to a first network element within said wide area network;

> detecting a physical separation of said electronic device and an associated user;

> determining identifying indicia of said electronic device, wherein said identifying indicia are automatically transmitted by said electronic device during communication on the wide area network between said electronic device and [[a]] the second network element of said wide area network;

> the first network element monitoring traffic on said wide area network at said first network element utilizing said tracing tool, wherein said monitoring comprises:

>> in response to detecting said physical separation, the first network element intercepting data of said communication on the wide area network between said electronic device and said second network element, said data including said identifying indicia in response to detecting said physical separation; and

> determining a physical position of said electronic device within said wide area network in response to an interception of said identifying indicia.

25. (currently amended) The machine-readable medium of claim 24, wherein said method includes distributing comprises distributing said tracing tool to a plurality of Internet Protocol routers network elements within said wide area network.

26. (previously presented) The machine-readable medium of claim 24, wherein determining said identifying indicia of said electronic device comprises:

> identifying data transmitted by said electronic device prior to said physical separation utilizing a portion of said wide area network; and

> extracting said identifying indicia from said data transmitted by said electronic device prior to said physical separation.

27. (previously presented) The machine-readable medium of claim 24, wherein determining said identifying indicia of said electronic device comprises determining a media access control address of said electronic device.

28. (canceled)

29. (currently amended) The method of claim 1, wherein determining said physical position of said electronic device within said wide area network in response to said interception of said identifying indicia comprises:

    transmitting a link tracing message between said electronic device and said first network element;

    identifying a <u>third</u> network element coupled between said electronic device and said first network element in response to a transmission of said link tracing message; and

    determining said physical position of said electronic device utilizing <u>an identity of</u> said <u>third</u> network element coupled between said electronic device and said first network element.

30. (currently amended) The machine-readable medium of claim 24, wherein determining said physical position of said electronic device within said wide area network in response to said interception of said identifying indicia comprises:

    transmitting a link tracing message between said electronic device and said first network element;

    identifying a <u>third</u> network element coupled between said electronic device and said first network element in response to a transmission of said link tracing message; and

    determining said physical position of said electronic device utilizing <u>an identity of</u> said <u>third</u> network element coupled between said electronic device and said first network element.